

CLAIMS

What is claimed as new and desired to be protected by Letters Patent of the United States is:

1. An image capture sensor including:
 - a light detection transistor including a light sensitive layer which conducts electricity in response to detection of a predetermined amount of light;
 - a switch interconnected to the light detection transistor and responsive to detection of light by the light detection transistor;
 - a glass substrate layered over the light detection transistor and switch and upon which a patterned object to be imaged is placed.
2. The device of claim 1 further including a capacitor that interconnects the light detection transistor and the switch.
3. The device of claim 2 wherein the switch is a transistor switch.
4. The device of claim 3 including a first light shielding layer that reduces the amount of light to which a first surface of the light sensitive layer is exposed.
5. The device of claim 4 wherein the glass substrate includes a fiber-optic layer having fiber-optic strands formed perpendicularly to a surface of the fiber-optic layer on which an object to be imaged is placed.
6. The device of claim 5 wherein the object to be imaged is a fingerprint.
7. The device of claim 6 including a backlight positioned such that the light sensitive transistor and switch are positioned between the glass substrate and the backlight.
8. The device of claim 4 including a conductive layer and an insulating layer, the conductive layer formed over the glass substrate and the insulating layer formed over the conductive layer such that both the conductive layer and the insulating layer are between the glass substrate and the light sensing transistor.

9. The device of claim 7 wherein the object to be imaged is a fingerprint.
10. A method of imaging a patterned object including:
providing an image capture sensor having:
 - a light detection transistor including a light sensitive layer which conducts electricity in response to detection of a predetermined amount of light;
 - a switch interconnected to the light detection transistor and responsive to detection of light by the light detection transistor;
 - a glass substrate layered over the light detection transistor and switch; andplacing the object to be imaged on the glass substrate.
11. The method of claim 10 wherein placing the object to be imaged on the glass substrate includes placing a fingerprint to be imaged on the glass substrate.
12. The method of claim 11 wherein providing an image capture sensor includes providing an image capture sensor having a glass substrate including fiber-optic strands.
13. The method of claim 11 wherein providing an image capture sensor includes providing an image capture sensor having a conductive layer formed over the glass substrate and an insulating layer formed over the conductive layer.
14. An image capture sensor including:
 - a light detection transistor including a light sensitive layer which conducts electricity in response to detection of a predetermined amount of light;
 - a switch interconnected to the light detection transistor and responsive to detection of light by the light detection transistor;
 - a substrate layered over the light detection transistor and switch and upon which a patterned object to be imaged is placed, the substrate including fiber-optic strands.
15. The device of claim 14 further including a capacitor that interconnects the light detection transistor and the switch.

16. The device of claim 15 wherein the switch is a transistor switch.
17. The device of claim 16 including a first light shielding layer that reduces the amount of light to which a first surface of the light sensitive layer is exposed.
18. The device of claim 17 wherein the fiber-optic strands are formed perpendicularly to a surface of the substrate.
19. The device of claim 18 wherein the object to be imaged is a fingerprint.